

## CLAIMS:

1. An electric lamp comprising a glass component, the composition of the glass component being substantially free of PbO and comprising, expressed as a percentage by weight, the following constituents:

5 55–70 weight% SiO<sub>2</sub>,  
<0.1 weight% Al<sub>2</sub>O<sub>3</sub>,  
0.5–4 weight% Li<sub>2</sub>O,  
0.5–3 weight% Na<sub>2</sub>O,  
10 10–15 weight% K<sub>2</sub>O,  
0–3 weight% MgO,  
0–4 weight% CaO,  
0.5–5 weight% SrO,  
7–10 weight% BaO.

2. The electric lamp as claimed in claim 1, characterized in that the composition  
15 of the glass component comprises:

65–70 weight% SiO<sub>2</sub>,  
1.4–2.2 weight% Li<sub>2</sub>O,  
1.5–2.5 weight% Na<sub>2</sub>O,  
11–12.3 weight% K<sub>2</sub>O,  
20 1.8–2.6 weight% MgO,  
2.5–5 weight% CaO,  
2–3.5 weight% SrO,  
8–9.5 weight% BaO.

25 3. The electric lamp as claimed in claim 1 or 2, characterized in that the composition of the glass component in addition comprises: 0.01–0.2 weight% Fe<sub>2</sub>O<sub>3</sub> or 0.01–0.2 weight% CeO<sub>2</sub>.

4. The electric lamp as claimed in claim 1 or 2, characterized in that the composition of the glass component in addition comprises: 0.01–0.2 weight%  $\text{SO}_3$ .

5. The electric lamp as claimed in claim 1 or 2, characterized in that the sum of the concentrations of  $\text{Li}_2\text{O}$ ,  $\text{Na}_2\text{O}$ , and  $\text{K}_2\text{O}$  is in the range from 14 to 16 weight%.

6. The electric lamp as claimed in claim 1 or 2, characterized in that the sum of the concentrations of  $\text{SrO}$  and  $\text{BaO}$  is in the range from 10 to 12.5 weight%.

10 7. A stem for an electric lamp having a glass portion, the glass portion having a composition as claimed in claim 1 or 2.

8. A lamp envelope which is manufactured from a glass having a composition as claimed in claim 1 or 2.

15

9. The lamp envelope as claimed in Claim 8, characterized in that the lamp envelope is tubular.

10. A mercury vapor discharge lamp comprising a lamp envelope, the lamp envelope enclosing, in a gastight manner, a discharge space provided with a filling of mercury and a rare gas, the lamp envelope comprising discharge means for maintaining a discharge in the discharge space, characterized in that the lamp envelope is made from a glass having a composition as claimed in claim 1 or 2.

20 11. A glass for use in glass components of electric lamps, the glass having a composition as claimed in claim 1 or 2.

25